

**REMARKS**

The Office Action of February 26, 2004 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.

Claims 13, 16, 17, 20, 21, 23, 24, 25, 26, 28, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takasaki et al. (U.S. 4,363,868) in view of Sherman (U.S. 4,563,367), and claims 22 and 27 are rejected under 35 U.S.C. 203(a) as being unpatentable over Takasaki et al. in view of Sherman, as applied to claims 21 and 26 above, and further in view of Tanaka et al. (U.S. 4,525,381). These rejections are traversed for the reasons advanced in detail below.

With regards to the above rejections, the Examiner is combining U.S. Patent No. 4,363,868 with U.S. Patent No. 4,563,367 to reject the pending claims. Such a combination is improper and fails to establish prima facie obviousness. Specifically, referring to rejected claim 13 as an example, this claim recites a step of placing a substrate on a first electrode, a step of introducing a film forming gas through a second electrode and also introducing a cleaning gas through the second electrode. The primary reference Takasaki appears to teach the claimed steps of placing a substrate on a first electrode and introducing a film forming gas through a second electrode. Takasaki does not teach the use of a cleaning gas at all. The Examiner relies upon Sherman in order to modify Takasaki so as to include a step of introducing a cleaning gas through the second electrode.

The Examiner is contending that the apparatus of Fig. 2 of Takasaki shows the kind of "conventional semiconductor-processing vacuum chamber" that Sherman discloses in the abstract, but not having the special apparatus 30. The Examiner further states that Sherman's example of a prior art plasma CVD does not have gas going into the upper electrode, but this other kind of chamber with a so-called gas electrode showerhead was certainly known as evidenced by Takasaki et al. These arguments are not sufficient for justifying the proposed combination and modification of the references.

There is absolutely no disclosure in the references themselves to suggest the proposed modification. Takasaki only discloses the step of introducing the film forming gas through an electrode opposed to the substrate holding electrode. There is no mention of a cleaning


gas whatsoever. The Sherman patent discloses the use of cleaning gas, but includes a very different structure. The fact that Sherman discusses a "conventional semiconductor-processing vacuum chamber," which is relied upon by the Examiner to support the combination, actually teaches away from the combination, in that Sherman discusses such a "conventional" apparatus and then goes on to disclose and claim a very complicated inner chamber for introduction of film forming and cleaning gases as an improvement over the conventional apparatus. As a result, one of skill in the art would be taught by this combination that the "conventional" apparatus of Takasaki is not sufficient to accomplish both film forming and cleaning steps, but instead a more complex method is required utilizing a special internal plasma generator chamber. The courts have repeatedly held that references combined under 35 U.S.C. §103 must include some suggestion or motivation to combine them. Specifically, the "[m]ere fact that the prior art may be modified to produce the claimed invention does not make modification obvious unless prior art suggested the desirability of modification." *In re Fritch*, 23 U.S.P.Q.2d 1780 (Fed.Cir.1992). Only by engaging in hindsight based upon Applicants' own disclosure can the combination of the cited references be made. Consequently, it is respectfully requested that the rejections based on Takasaki and Sherman be reconsidered and withdrawn.

In addition, the courts have held that the modification of a reference that destroys the intent, purpose, or function of the invention disclosed therein is not proper, and the prima facie case of obviousness cannot be properly made. *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). The Examiner appears to be merely asserting that the apparatus of Takasaki and Sherman are similar enough to suggest a modification thereof. However, as noted above, there can be no suggestion to modify Takasaki method to incorporate the teachings of Sherman because the apparatus are so different. Further, the method of Sherman cannot be modified to incorporate the teachings of Takasaki because it would destroy the complex teachings of Sherman relating to the internal plasma generator chamber.

In view of the foregoing, it is respectfully requested that the rejections of record be reconsidered and withdrawn by the Examiner, that claims 13, 16, 17, 20-30 be allowed and that the application be passed to issue.

If a conference would expedite prosecution of the instant application, the Examiner is hereby invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,

  
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